Fish Habitat & DOCKS, BOATHOUSES AND BOAT LAUNCHES

onstruction of a dock, boathouse or boat launch may be harmful to fish and fish habitat. This fact sheet provides information about whom you should contact for government agency approvals, and some best practices for preventing or minimizing any damage during the construction of your project.

Shoreline areas provide habitat for a variety of aquatic organisms including fish. The nearshore area is where many fish species lay their eggs, feed and seek protection from predators. Changes or disruptions to these areas can threaten their survival. If you own or lease waterfront property, you can help protect the fish populations in your lake or river by protecting fish habitat along your shoreline.

Be aware of the *Fisheries Act* and other legislation

The federal *Fisheries Act* provides for the protection of fish habitat. Under this Act, no one may carry out any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat (HADD), unless authorized by the Minister of Fisheries and Oceans Canada. The Act also states that no one is permitted to deposit a deleterious (harmful) substance into water containing fish. Violations to the Fisheries Act can result in substantial fines, and/or the risk of imprisonment. If found guilty, then the violator may also be required to cover the costs of restoring the habitat at the site and/or be required to fulfill other court ordered remedies. Other legislation that may be relevant to building a dock, boathouse or boat launch is outlined in the introductory Fact Sheet: Working Around Water? What you should know about Fish Habitat.

Contacts and approvals

If your project involves building or modifying a dock, boathouse or boat ramp, the table on the next page will help you determine which agency you should contact. In some instances, you may have to contact more than one agency. Keep in mind that approval from one government agency does not guarantee that you will be able to obtain approval from another agency. Remember, you must obtain all approvals before starting work. Early consultation can save you from designing a project that will not be approved.



Information you will need to submit

When seeking approvals or permits you will need to submit the following information:

- Your name, address, telephone number, and if available, a fax number and e-mail address
- Rationale for the dock, boathouse or boat launch and the design you have chosen
- Waterbody name and location including the lot and concession numbers, county, township, municipality, and if known, latitude and longitude
- Proof of ownership for each of the properties where the work will be done and the most recent legal survey(s)
- Detailed description of the work site including a signed and dated map or sketch with dimensions indicating the location and distances to the average annual high-water mark of existing buildings, shoreline structures and property lines
- Plan view (top down) sketch or drawing of the work area showing existing shoreline length (m), the proposed dock, boathouse or boat launch and the distances to the average annual high-water mark
- Cross-sectional (side view) drawing (with dimensions) of proposed structures, indicating the current water level and distances to the average annual high-water mark

- Design of in-water support structures and the material used to build them
- Description of the type of substrate at the construction site indicating approximate percentages of sand, silt, clay, rock, gravel and aquatic vegetation, etc.
- List of any heavy equipment to be used
- Proposed start and completion dates
- Information you have about fish and boat use in the area
- Photographs of the work site and surrounding shoreline during ice-free conditions
- Description of any proposed use of explosives
- Other agencies contacted.

A site visit by agency staff may be necessary before your proposal can be approved.

Best practices

The following practices are intended to prevent or minimize any potential harmful impacts to fish and fish habitat that may result from your project:

Select a structure which minimizes disturbance to the river or lake bottom:

Cantilever, floating and post-supported docks and boathouses are generally preferred because they do not disturb river or lake bottoms, nor do they restrict the movement of water near the shore. If rock filled cribs are necessary, try to keep their sizes to a minimum. The least preferred structures use concrete or steel sheet piles. **If cribs are to be built, use an open-faced design:** Where cribs are built from timbers and are filled with rock, it is best if the crib is open-faced. Open-faced cribs without solid planking provide fish and other aquatic organisms spaces to hide from predators. It is best if cribs are placed at least 2 metres out from the average annual high-water mark.

Avoid vertical planking: Docks and boathouses are acceptable if there is bridging between cribs or poles that allows water to circulate. Vertical planking is not recommended along the sides of a dock because it can restrict water movement. Use clean rocks taken from dry land: If your project requires rocks, they must be clean and free of soil. Rocks must not be taken from the lake or river bottom, or the shoreline. Removal of rocks from these areas could destroy fish habitat and result in charges under the Fisheries Act. If cribs or other solid structures are approved for use, ensure that there is as much open span between solid components as possible: Generally, solid docks made from steel sheeting or concrete will not be approved. These structures are vulnerable to ice damage, destroy fish habitat, and can create stagnant backwater areas. If your dock requires a concrete abutment, this should be located entirely on the upland property, above the average annual high-water mark.

Be careful with pressure treated wood: If you are planning to use pressure treated lumber for decking, all cutting, end sealing, staining, etc. should be done well back from the water.

The wood should be completely dry before being attached to the dock structure. Also, never use creosote treated wood in or near water. These practices will help to reduce the amount of contaminants released into the waterbody. Use untreated cedar or hemlock timbers for structures below the average annual high-water mark. When submerged, these timbers will last a lifetime. Further information can be found in Fact Sheet C-3: Working Around Water? Fish Habitat & Building Materials.

Avoid projects which involve in-water dredging: Dredging can be harmful to fish and their habitat. If your project involves dredging, see Fact Sheet I-1: Working Around Water? Fish Habitat & Dredging.

Timing is critical: In-water activities should not occur during local fish spawning and nursery periods since they could disturb spawning behaviour, smother eggs and kill young fish. If you are planning any in-water work, contact your local provincial regulatory authority(ies) for details on the timing your project.

Maintain or preserve shoreline vegetation: Shoreline vegetation provides overhead cover for fish, shade to minimize warming of the water and a source of food for fish (e.g. insects fall off the vegetation into the water). Nearshore vegetation also provides shoreline stabilization and benefits to wildlife. The removal of some vegetation adjacent to the waterbody may be necessary to allow equipment access. After completing the project, all areas should be stabilized to prevent erosion and be re-vegetated as soon as possible.

Contact information – Ontario

If the dock, boathouse or boat launch proposal...

- is in the Rideau Canal or Trent-Severn Waterway
- is in a federally owned small craft harbour
- may affect boat navigation
- involves the use of explosives in or near water
- is in a public (Crown) or private water lot and has a foundation or cribs below the average annual high-water mark, or is supported on posts, stilts or poles

In addition, if the dock or boathouse proposal...

- has living accommodations and is
- not entirely on private property
- is above the average annual high-water
- mark and on private property
- is in a public (Crown) or private water lot and is floating, or is a cantilever design, and is removed from the water seasonally

is within a flood plain area

Your first contact should be ...

- Parks Canada Agency (PCA)
- Fisheries and Oceans Canada (DFO) Small Craft Harbours
- DFO Canadian Coast Guard (CCG) -Navigable Waters Protection Program
- DFO Fish Habitat Management ProgramYour local Conservation Authority (CA)
- Where there is no designated CA, contact your local Ontario Ministry of Natural Resources (OMNR) office

Your first contact should be ...

- Your local OMNR office
- Approvals may be required from your local CA if the structure is within the flood plain or fill regulated area.
- Approvals are generally not necessary Follow the environmentally friendly practices listed in this fact sheet. Large or commercial structures may require DFO-CCG approval or land tenure authority from the OMNR
 - Contact your local CA or OMNR office

For more information, see the electronic version of *The Dock Primer* on our Web site at www.dfo-mpo.gc.ca/ canwaters-eauxcan, under "Contact Information", under "Infocentre", then "Guidelines and Factsheets".

Construction

Building a small walkway from your cottage to the dock or boathouse or having a small regularly used path helps preserve shoreline vegetation. **Do not remove rocks or woody material:** Rocks, stumps, logs and woody material provide good fish habitat and prevent erosion. These materials should not be removed from areas under the average annual high-water mark. If any materials need to be temporarily removed, they should be stockpiled and replaced to where they came from, or to an adjacent area of similar water depth.

Use environmentally friendly materials for boat launches: Avoid constructing boat launches out of concrete. Pre-fabricated or poured concrete will destroy the fish habitat on which it is placed. Use alternatives such as gravel or a marine railway. Avoid covering aquatic vegetation or removing shoreline vegetation to construct a boat launch.

Working together to protect fish habitat

Help maintain the quality and quantity of fish habitat in our lakes and streams. For more advice on how to construct an environmentally friendly dock, boathouse, or boat launch, contact your local agency staff directly.

Contact information

www.dfo-mpo.gc.ca/ canwaters-eauxcan

Canada

Cette publication est également disponible en français.

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